

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1, 4-9, 14-17, and 19 are currently pending. Claims 1, 17, and 19 having been amended by the present amendment. The changes to the claims are supported by the originally filed specification, for example, at Figure 8 and the associated descriptions. Thus, no new matter has been added.

In the outstanding Office Action, Claims 1, 4, 6-9, 14, and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yeh et al. (U.S. Patent No. 7,623,140, hereinafter “Yeh”) in view of Miyamoto et al. (U.S. Patent No. 7,496,278, hereinafter “Miyamoto”), Hung (U.S. Patent No. 7,676,142), and Nakayama (JP 2003-259213); Claims 5, 15, and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yeh in view of Miyamoto, Hung, Nakayama, and Jetha et al. (U.S. Patent No. 6,661,426, hereinafter “Jetha”); and Claim 19 was rejected under 35 U.S.C. §103(a) as being unpatentable over Yeh in view of Miyamoto, Hung, Nakayama, and the 1984 publication “Structured Computer Organization” by Tanenbaum (hereinafter “Tanenbaum”).

Initially, Applicants note that the Office Action appears to assert that Claim 1 invokes 35 U.S.C. § 112, sixth paragraph for the features of the “reproducing unit,” the “determining unit,” the “first blending unit,” the “second blending unit,” the “third blending unit,” and the “fourth blending unit.” However, Applicants note that MPEP § 2181 states:

A claim limitation will be presumed to invoke 35 U.S.C. 112, sixth paragraph, if it meets the following 3-prong analysis:

(A) ***the claim limitations must use the phrase “means for”...***

With respect to the first prong of this analysis, ***a claim element that does not include the phrase “means for” ... will not be considered to invoke 35 U.S.C. 112, sixth paragraph.***
... See Watts v. XL Systems, Inc., 232 F.3d 877, 56 USPQ2d

1836 (Fed. Cir. 2000) (Claim limitations were held not to invoke 35 U.S.C. 112, sixth paragraph, because the absence of the term “means” raised the presumption that the limitations were not in means-plus-function form).

Accordingly, Claim 1 should not be presumed to invoke 35 U.S.C. § 112, sixth paragraph, for the above-noted features since Claim 1 does not meet the first prong of the analysis described above.

With respect to the rejection of Claim 1 under 35 U.S.C. § 103(a), Applicants respectfully traverse this ground of rejection, as independent Claim 1 recites novel features not taught or rendered obvious by the applied references. Amended Claim 1 recites, *inter alia*,

a determining unit configured to determine whether the content data being currently reproduced from the recording medium includes one of a first moving picture, a second moving picture, presentation graphics data, and interactive graphics data, and provides the content data being currently reproduced to one of a first plane memory, a second plane memory, a third plane memory, and a fourth plane memory based on the determination;

the first plane memory configured to store the first moving picture data reproduced from the recording medium;

the second plane memory configured to store the second moving picture data reproduced from the recording medium;

a selection means for selecting at least one of an output of the first plane memory and the second plane memory on a pixel-by-pixel basis;

a first scaling unit configured to change a size of the first moving picture output from the first plane memory;

a second scaling unit configured to change a size of the second moving picture output from the second plane memory;

the third plane memory configured to store the presentation graphics data reproduced from the recording medium;

the fourth plane memory configured to store the interactive graphics data reproduced from the recording medium;

a first blending unit configured to modify an opacity of an output from the selection means based on a first predetermined opacity value;

a second blending unit configured to modify an opacity of the presentation graphics data stored in the third plane memory based on the first predetermined opacity value;

a first combining means for adding an output from the first blending unit and the second blending unit;

a third blending unit configured to modify an opacity of an output from the first combining means based on a second predetermined opacity value;

a fourth blending unit configured to modify an opacity of the interactive graphics data stored in the fourth plane memory based on the second predetermined opacity value; and

a second combining means for adding an output from the third blending unit and the fourth blending unit,

wherein the selection means selects corresponding to an intended display position of a reduced size moving picture, and a display signal is generated based on the output of the selection means, and

wherein the first plane memory is a bottommost plane arranged before the second plane memory, the second plane memory is arranged between the first plane memory and the third plane memory, the third plane memory is arranged between the second plane memory and the fourth plane memory, and the fourth plane memory is a topmost plane.

Applicants submit that Yeh, Miyamoto, and Nakayama fail to disclose or suggest these features of Claim 1.

The Office Action acknowledges that Yeh fails to disclose or suggest the “details of the circuitry required to supply the various types of images to the image plane memories (@ 401, 403, 405, 407) of Figure 4 (i.e. does not disclose the circuitry required for scaling the scaled video signal & does not disclose the signals as being provided from a recording medium)” and the “details of the structure required to implement the first blender (@1141) of

Figure 11 (e.g. as comprising multipliers for modifying the opacity of the signals being combined).” (See Office Action, page 8).

The Office Action relies on Miyamoto to remedy the deficiencies of Yeh with regard to previously presented Claim 1.

Miyamoto describes an apparatus for reproducing images stored on a memory card M on a television in a slide format by using multiple planes. (See Miyamoto, column 1, lines 34-67). Miyamoto shows, in Figure 11, the apparatus including a scaling processing unit 1102 and a video memory 107 which includes a moving image plane 1109, a still image plane 1110, a character and graphic plane 1112, and a subtitle plane 1113. (See Miyamoto, column 9, lines 32-35; and Figure 11).

The Office Action appears to assert that the moving image plane 1109, the still image plane 1110, the subtitle plane 1113, and the character and graphic plane 1112 of Miyamoto respectively correspond to the “first plane memory,” the “second plane memory,” the “third plane memory,” and the “fourth plane memory,” as defined in previously presented Claim 1. (See Office Action, pages 8-9). In addition, the Office Action appears to assert that the scaling processing unit 1102 of Miyamoto corresponds to the “reducing unit configured to reduce a size of the first moving picture or the second moving picture,” as recited in previously presented Claim 1. (See Office Action, pages 8-9).

However, Miyamoto merely describes that the *single* scaling processing unit 1102 changes a size of image data received from an image decoding unit 1103 and that a writing control unit 1101 writes the image data having the changed size from the scaling processing unit 1102 to one of the moving image plane 1109, the still image plane 1110, the character and graphic plane 1112, and the subtitle plane 1113. (See Miyamoto, column 9, lines 20-35; and Figure 11). In addition, Miyamoto simply shows, in Figure 11, that the plane memories

are arranged in order of the moving image plane 1109, the still image plane 1110, the character and graphic plane 1112, and the subtitle plane 1113.

Miyamoto does not describe the scaling processing unit 1102 (i.e., as the first scaling unit) changing a size of a first moving picture output from the moving image plane 1109 (i.e., as the first plane memory), a second scaling unit configured to change a size of a second moving picture output from the still image plane 1110 (i.e., as the second plane memory), and that the moving image plane 1109 (i.e., as the first plane memory) is a bottommost plane arranged before the still image plane 1110 (i.e., as the second plane memory), the still image plane 1110 (i.e., as the second plane memory) is arranged between the moving image plane 1109 (i.e., as the first plane memory) and the subtitle plane 1113 (i.e., as the third plane memory), the subtitle plane 1113 (i.e., as the third plane memory) is arranged between the still image plane 1110 (i.e., as the second plane memory) and the character and graphic plane 1112 (i.e. as the fourth plane memory), and the character and graphic plane 1112 (i.e. as the fourth plane memory) is a topmost plane.

The Office Action further relies on Nakayama to remedy the deficiencies of Yeh with regard to previously presented Claim 1.

Nakayama describes an image processing technique and shows, in Figure 1, a video plane (VP), a still picture plane (SP), a change plane (CP), a character figure plane (TP), and a title plain (GP). (See Nakayama, paragraph [0003]; and Figure 1).

The Office Action appears to assert that the still picture plane (SP), the video plane (VP), the change plane (CP), the character figure plane (TP), and the title plain (GP) of Nakayama respectively correspond to the “first plane memory,” the “second plane memory,” the “third plane memory,” and the “fourth plane memory,” as defined in previously presented Claim 1. (See Office Action, pages 8-9). However, Nakayama merely describes and shows in

Figure 1 that the frames are arranged from the video plane (VP), the still picture plane (SP), the change plane (CP), the character figure plane (TP), and the title plain (GP).

Nakayama does not describe or show a first scaling unit configured to change a size of a first moving picture output from the video plane (VP) (i.e., as the first plane memory), a second scaling unit configured to change a size of a second moving picture output from the still picture plane (SP) (i.e., as the second plane memory), and that the video plane (VP) (i.e., as the first plane memory) is a bottommost plane arranged before the still picture plane (SP) (i.e., as the second plane memory), the still picture plane (SP) (i.e., as the second plane memory) is arranged between the video plane (VP) (i.e., as the first plane memory) and the title plain (GP) (i.e., as the third plane memory), the title plain (GP) (i.e., as the third plane memory) is arranged between the still picture plane (SP) (i.e., as the second plane memory) and the character figure plane (TP) (i.e. as the fourth plane memory), and the character figure plane (TP) (i.e. as the fourth plane memory) is a topmost plane.

Therefore, Applicants respectfully submit that Yeh, Miyamoto, and Nakayama do not disclose or suggest “a determining unit configured to determine whether the content data being currently reproduced from the recording medium includes one of a first moving picture, a second moving picture, presentation graphics data, and interactive graphics data, and provides the content data being currently reproduced to one of a first plane memory, a second plane memory, a third plane memory, and a fourth plane memory based on the determination; the first plane memory configured to store the first moving picture data reproduced from the recording medium; the second plane memory configured to store the second moving picture data reproduced from the recording medium; a selection means for selecting at least one of an output of the first plane memory and the second plane memory on a pixel-by-pixel basis; a first scaling unit configured to change a size of the first moving picture output from the first plane memory; a second scaling unit configured to change a size of the second moving

picture output from the second plane memory; the third plane memory configured to store the presentation graphics data reproduced from the recording medium; the fourth plane memory configured to store the interactive graphics data reproduced from the recording medium; a first blending unit configured to modify an opacity of an output from the selection means based on a first predetermined opacity value; a second blending unit configured to modify an opacity of the presentation graphics data stored in the third plane memory based on the first predetermined opacity value; a first combining means for adding an output from the first blending unit and the second blending unit; a third blending unit configured to modify an opacity of an output from the first combining means based on a second predetermined opacity value; a fourth blending unit configured to modify an opacity of the interactive graphics data stored in the fourth plane memory based on the second predetermined opacity value; and a second combining means for adding an output from the third blending unit and the fourth blending unit, wherein the selection means selects corresponding to an intended display position of a reduced size moving picture, and a display signal is generated based on the output of the selection means, and wherein the first plane memory is a bottommost plane arranged before the second plane memory, the second plane memory is arranged between the first plane memory and the third plane memory, the third plane memory is arranged between the second plane memory and the fourth plane memory, and the fourth plane memory is a topmost plane,” as recited in Claim 1.

In view of these considerations, it is respectfully submitted that Yeh, Miyamoto, and Nakayama fail to disclose or suggest or make obvious the pending claims. Accordingly, withdrawal of the rejection based on Yeh, Miyamoto, and Nakayama is respectfully requested for at least these reasons.

Hung, Jetha, and Tanenbaum have been considered but fail to remedy the deficiencies of Yeh, Miyamoto, and Nakayama with regard to Claim 1. Therefore, Applicants submit that

Claim 1 (and all associated dependent claims) patentably distinguishes over Yeh, Miyamoto, Nakayama, Hung, Jetha, and Tanenbaum, either alone or in proper combination.

Additionally, although differing at least in scope, independent Claims 17 and 19 recite features similar to that of Claim 1 discussed above. Thus, Applicants submit that Claims 17 and 19 patentably distinguish over Yeh, Miyamoto, Nakayama, Hung, Jetha, and Tanenbaum, either alone or in proper combination.

Consequently, in light of the above discussion and in view of the present amendment, the outstanding grounds for rejection are believed to have been overcome. The present application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

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